

*E2* *concluded* *F*  
 a second electromagnetic actuator that is different from said first electromagnetic actuator to drive said second stage with a first thrust in said first direction with respect to said first stage, said first thrust being different from said second thrust.

*E2*  
 59. (Twice Amended) A scanning exposure apparatus that moves a mask with respect to a projection optical system while illuminating said mask on which a transfer pattern is formed and synchronously moves a photosensitive substrate with respect to said projection optical system, thereby projecting and exposing said pattern on said mask onto said substrate through said projection optical system, comprising:

a base that holds the following elements;

a scanning stage that is movable, with respect to said base, along a first direction corresponding to a moving direction of said mask and said substrate;

a fine adjustment stage that is movable along the first direction with respect to said scanning stage, said fine adjustment stage mounting one of said mask and said substrate, and a size of said fine adjustment stage being smaller than a size of said scanning stage; and

an actuator that drives said fine adjustment stage to prevent a positional error between said scanning stage and said fine adjustment stage at least when said scanning stage is being at least one of accelerated and decelerated during a scanning exposure operation.

66. (Twice Amended) A stage apparatus comprising:

a first stage that is linearly movable in a first direction;

*E3*  
 a second stage that is movable in said first direction with respect to said first stage, a size of said second stage being smaller than a size of said first stage; and

an actuator that drives said second stage in said first direction, said actuator driving said second stage at least when said first stage is being at least one of accelerated and decelerated, said actuator having a first portion connected to said first stage and a second portion connected to said second stage.

71. (Twice Amended) A stage driving method for driving, in a predetermined direction, a first stage that is arranged to be movable linearly in a first direction and for driving a second stage that is arranged to be movable at least in said first direction with respect to said first stage, comprising the steps of:

providing an actuator to drive said second stage, said actuator having a first portion connected to said first stage and a second portion connected to said second stage;

driving said first stage; and

driving said second stage to prevent a positional error between said first stage and said second stage at least when said first stage is being at least one of accelerated and decelerated, a size of said second stage being smaller than a size of said first stage.

76. (Twice Amended) A stage driving method for scanning an object that includes at least one of a mask and a photosensitive substrate, in a scanning exposure apparatus that illuminates said mask on which a transfer pattern is formed and scans said mask in a predetermined scanning direction and synchronously scans said substrate in a direction corresponding to said scanning direction, thereby exposing said pattern onto said substrate, said method comprising the steps of:

driving a first stage in said scanning direction, said first stage being used for scanning one of said mask and said substrate; and

driving a second stage in said scanning direction by an actuator having a first portion connected to said first stage and a second portion connected to said second stage to prevent a positional error between said first stage and said second stage at least when said first stage is being at least one of accelerated and decelerated during said scanning exposure, said second stage being movable in said scanning direction with respect to said first stage, said second stage mounting said object thereon, and a size of said second stage being smaller than a size of said first stage.